

Specification Amendments:

Please replace the following paragraphs in the specification at the following locations, wherein the added text is shown as underlined:

At page 12, lines 10 – 21:

According to the invention, the term “appropriate CaMAP substrates” includes all substrates of the peptidyl-prolyl *cis/trans* isomerases. In particular, these are substances having a prolyl peptide bond. “Appropriate CaMAP substrates” in accordance with the invention are described in numerous articles of the technical literature known and available to the person skilled in the art, e.g.: *Clinical Chemistry*. 44(3):502-8, 1998; *Analytical Biochemistry*. 252(2):299-307, 1997; *Biochemistry*. 34(41):13594-602, 1995; *Biochemistry*. 30(25):6127-34, 1991; *Biochemistry* 30(25):6127-34, 1991; *Journal of Molecular Biology*. 271(5):827-37, 1997, or are cited in patent specifications such as CA2334812; EP0647713; WO0142245; EP0360029. Especially preferred CaMAP substrates, in accordance with the invention, are peptides showing a Xaa-Pro-Yaa-group, wherein Xaa designates preferably the amino acids Glu, Phe, or Leu, such as Suc-Ala-Phe-Pro-Phe-NHNp (**SEQ ID NO: 1**) or Suc-Ala-Ala-Glu-Pro-Arg-NHNp (**SEQ ID NO: 2**).

At page 33, lines 19 - 29:

The human CaMAP FKBP38 (synonyms: FKBP8_HUMAN; Swiss-Prot-No.: Q14318) was produced molecular-biologically, as described in Example 9, and stored in aliquots of 100 µl with a protein concentration of 0.83 mg/ml at –80°C. Just before measuring the activity, one of these aliquots was thawed and subsequently stored at 4°C. Furthermore, commercially available calmodulin isolated from bovine brain (Sigma; purchase order no.: P2277), which had been stored at –80°C, was thawed just before measuring the activity and stored at 4°C. Suc-Ala-Phe-Pro-Phe-pNA (**SEQ ID NO: 1**; Bachem; purchase order no.: L-1400) was used as CaMAP substrate. Alpha-chymotrypsin isolated from bovine pancreas (Merck KG; purchase order no.: 102307) was used as isomer

specific auxiliary enzyme. The following working solutions were prepared just before measuring and stored at 4°C:

At page 34, lines 16 - 22:

To carry out the assay, an instruction described in patent specification WO0188178 and the appliance combination described in patent specification WO0102837 is used and modified as follows: the following solutions are prepared: substrate solution: 2 mg/ml disulfide bridged Abz-Cys-Phe-Pro-Ala-Cys-Phe-NHNp (**SEQ ID NO: 3**) in DMSO; enzyme solution: 1 μ M solution of human FKBP38; 5 μ M calmodulin (preparation see Example 9), 5 mM CaCl_2 in 50 mM HEPES buffer, pH 7.5; effector solutions: 0.1 mg/ml substance in DMSO; starter solution: 100 mM DTT in 50 mM HEPES buffer, pH 7.5.

At page 35, lines 33 – 35 and page 36, lines 1 - 2:

Databases accessible to the person skilled in the art, such as Swiss-Prot; TrEMBL; Trenw; Trest; Trgen; Trome etc., which are accessible under <http://www.expasy.com>, allow relatively easy search for CaMAPs by entering calmodulin sequence motifs (cf.: *FASEB J.* 1997 Apr;11(5):331-40; *Nature* 410(2001)1120-1124). Searching with the helical CaM motif KHAAQRSTETALYRKM (**SEQ ID NO: 4**) results in the following hits:

At page 37, lines 3 – 18:

The following solutions are prepared in order to detect the inhibition of the PPIase activity of CaMAP FKBP38: solution H: DMSO; solution I: 15 mM solution of FK506 (Fujisawa GmbH) in DMSO. According to Example 1, two cuvettes are charged with 1 µl solution B (substrate); 0,5 µM FKBP38, 0,5 µM calmodulin and 5 mM calcium chloride. Subsequently, 1 µl of solution H is added to cuvette 5a and, for comparison, 1 µl solution I is added to cuvette 5b. After mixing the solutions, the cuvettes are stored at 6°C for 20 minutes. Subsequently, the determination of PPIase activity is started, as described in Example 1, adding solution C (chymotrypsin) by pipetting. When using substrate Suc-Ala-Phe-Pro-Phe-NHNp (**SEQ ID NO: 1**), the calculated evaluation of the

isomerization velocity of the solution in cuvette 5a results in a value of 0.0071 s^{-1} and in cuvette 5b in a value of 0.0105 s^{-1} . The value of 0.0071 corresponds to the uncatalyzed reaction in Figure 1b. The value of 0.0105 corresponds to the catalyzed reaction of Figure 1a. The progress curve 1d corresponds to the uncatalyzed reaction. Thus, the PPIase activity of CaMAP FKBP38 can be inhibited by the FKBP inhibitor FK506. Plotting the inhibitor concentration against the detected enzyme activity yields an IC_{50} value of about $4.3 \text{ }\mu\text{M}$.

At page 41, after line 32, please add the following new paragraphs, beginning on a separate page.